IN THE SPECIFICATION

Please replace the paragraph bridging pages 2 and 3 with the following rewritten paragraph:

In the internet, the DNS (Domain ~~Drain~~ Name System) is used to detect the correspondence between the terminal name of a terminal and the terminal address. The DNS introduces a DNS server that manages the correspondences between the terminal's names of terminals to be managed and the terminal addresses and predetermines the procedure of making inquiries from a terminal to the DNS server and the procedure of making inquiries between servers. In most cases, the address of the DNS server managing a terminal is set to the terminal itself. Fig. 16 depicts the case where the terminal 1 detects the terminal address of the terminal 2. The terminal 1 transmits a DNS Query message requesting the terminal address of the terminal 2 to the DNS server (the DNS server 1 in Fig. 16) registered. The DNS server 1 inquires the DNS server (the DNS server 2 in Fig. 16) managing the terminal address of the terminal 2. Then the DNS server 1 notifies the terminal 1 of the address 2 (DNS Reply message) when obtaining the terminal address of the terminal 2 (address 2).

Please replace the paragraph bridging pages 10-12 with the following rewritten paragraph:

In the mobile terminal according to the present invention, the ad hoc network address management means comprises ad hoc network/ network address management means for receiving the receive packet and the ad hoc network connection signal, outputting a message requesting a network address containing a network address used in a new ad hoc network when a new ad hoc network is configured for connection as the transmission packet and a message representing a spent network address when the ad hoc network/ network

address request message containing the spent network address in an ad hoc network connected by the mobile terminal itself has been received, capturing a network address of an ad hoc network to which the mobile terminal itself is connected, based on the receive packet, outputting a network address captured signal representing that the captured network address and the network address have been captured, and managing the captured network address not to be used in an overlap mode; and an hoc network/ terminal address management means for receiving the receive packet, the ad hoc network connection signal, the captured network address, and the network address captured signal, outputting as the transmission packet a message requesting a terminal address list being used in the ad hoc network when the mobile terminal is connected to an existing ad hoc network and a message containing the terminal address list held by the mobile terminal itself in response to the address list requesting message, capturing a terminal address used in ad ~~ah~~-hoc network to be connected by the mobile terminal itself, based on the receive packet and the ad hoc network connection signal, and acknowledging a terminal address to be used in the ad hoc network connected by the mobile terminal itself.

Please replace the paragraph bridging pages 12-14 with the following rewritten paragraph:

In the mobile terminal according to the present invention, the destination address capture means comprises ad hoc/ infrastructure network identification means for receiving the receive packet, identifying whether or not a network to which the mobile terminal is connected is the infrastructure network of the ad hoc network, outputting a network identification signal representing a network to be connected to a network connected by the mobile terminal, outputting an infrastructure network connection signal when the

network to be connected is the infrastructure network, and outputting an ad hoc network connection signal when the network to be connected is the ad hoc network; a first switch for receiving the name of the opposite communication party's name of the mobile terminal itself and the network identification signal and selecting a destination of the opposite communication party's name based on the network identification signal; infrastructure network/ destination address capture means for receiving the infrastructure network connection signal and the opposite communication party's name, transmitting a message requesting a terminal address corresponding to the communication opponent's name, detecting a message containing a terminal address corresponding to the opposite communication party's name from the receive packet, and outputting the terminal address corresponding to the opposite communication party's name; ad hoc network/ destination address capture means for receiving the ad hoc network connection signal and the opposite communication party's name, transmitting a message requesting a terminal address corresponding to the opposite communication party's name, detecting a message containing a terminal address corresponding to the opposite communication party's name from the receive packet, and outputting the terminal address corresponding to the opposite communication party's name; a second switch ~~witch~~ for selectively outputting a terminal address corresponding to the opposite communication party's name captured by the infrastructure network/ destination address capture means and a terminal address corresponding to the opposite communication party's name captured by the ad hoc network/ destination address capture means, based on the network identification signal; and a third switch for selectively transmitting a message requesting a terminal address corresponding to the opposite communication party's name capture by the infrastructure network/ destination address capture means and a message requesting a terminal address corresponding the

opposite communication party's name captured by the ad hoc/ destination address capture means, based on the network identification signal.

Please replace the paragraph bridging pages 29 – 31 with the following rewritten paragraph:

In contrast, since there is no node functioning as a server such as a mobility agent in the ad hoc network, a mobile terminal itself sends an ad hoc network advertisement message containing network addresses in the ad hoc network connected thereto and, if required, an ad hoc network advertisement message. The ad hoc network integration network advertisement means 42 controls a ad hoc network advertisement message in the mobile terminal. The ad hoc network integration network advertisement means 42 controls transmission of an ad hoc network advertisement message using the method of controlling a mobile terminal according to the second aspect of the present invention. The ad hoc network advertisement message detection means 251 receives a receive packet input via the input terminal 40 and then detects an ad hoc network advertisement message. The ad hoc network advertisement request message detection means 252 receives a receive packet input via the input terminal 40 and then detects an ad hoc network advertisement request message. The ad hoc network advertisement message detection means 251 outputs an ad hoc network advertisement message detection pulse to the logical sum arithmetic circuit 257 and outputs a random timer halt pulse to the random timer 255. The ad hoc network request message detection means 252 outputs an ad hoc network advertisement request message receive pulse to the logical sum arithmetic circuit 253. The logical sum arithmetic circuit 257 receives an ad hoc network advertisement message detection pulse as well as a random timer time-out pulse output out of the random timer 255 and then outputs as a fixed timer activation pulse

the resultant logical sum to the fixed timer 254. The fixed timer 254 is reset every time the fixed timer start-up pulse is input. The fixed timer 254 measures a predetermined period of time and then outputs a fixed timer time-out pulse to the logical sum arithmetic circuit 253 when a time-out occurs. The logical sum arithmetic circuit 253 receives an ad hoc network advertisement request message receive pulse and a fixed timer time-out pulse and then outputs as a random timer start-up signal the resultant logical sum to the random timer 255~~254~~. The random timer 255 ~~254~~ starts measuring the time to be randomly set every time being started up in response to the random timer start-up pulse. The random timer 255 ~~254~~ is reset every time the random timer halt pulse is input. When the random timer 255 ~~254~~ becomes time-out, it outputs the random timer time-out pulse to the ad hoc network advertisement message transmission means 256 and the logical sum arithmetic circuit 257. The ad hoc network advertisement transmission means 256 starts up every time the random timer time-out pulse is input and then configures the ad hoc network advertisement message as a broadcast packet, thus outputting it via the output terminal 41.

Please replace the paragraph bridging pages 31-33 with the following rewritten paragraph:

In Fig. 1, the ad hoc/ infrastructure network integration network advertisement request means 43 can be configured as shown in Fig. 3. Referring to Fig. 3, numeral 40 ~~0~~ represents an input terminal; 41 represents an output terminal; 25 represents infrastructure network advertisement message receive means; 26 represents ad hoc network advertisement message receive means; 27a and 27b represent counters; 34 represents a timer; 33 represents an adder; 29 represents a comparator; 50 represents infrastructure network advertisement request message transmission means; 51 represents ad hoc network advertisement request

message transmission means; and 52 represents a transmission queue. A packet is input to the infrastructure network advertisement request message transmission means 25 and the ad hoc network advertisement message receive means 26 via the input terminal 40. The infrastructure network advertisement message receive means 25 outputs a pulse to the counter 27a every time it detects an infrastructure network advertisement message based on the input packet. The ad hoc network advertisement message receive means 26 outputs a pulse to the counter 27b every time it detects an ad hoc network advertisement message based on the input packet. Each of the counters 27a and 27b counts up the number of input pulses. In response to a reset pulse from the timer 34, the counters 27a and 27b output respective count-up values to the adder 33. The timer 34 measures a predetermined period of time and then sends a reset pulse to the counters 27a and 27b when the time-out occurs while starting up. The adder 33 adds the output from the counter 27a with the output from the counter 27b and then outputs the sum to the comparator 29. The comparator 29 compares the output from the comparator with zero and then outputs a pulse representing zero or other status to the infrastructure network advertisement request message transmission means 50 and the ad hoc network advertisement request message transmission means 51. When the input pulse indicates zero, each of the infrastructure network advertisement request message transmission means 50 and the ad hoc network advertisement request message transmission means 51 judges that the mobile terminal has moved and then outputs a broadcast packet configured of an infrastructure network advertisement request message and an ad hoc network advertisement request message to the transmission queue 52 to capture the network after movement. The transmission queue 52 transmits as a broadcast packet the infrastructure network advertisement request message and an ad hoc network advertisement request message onto the communication medium via the output terminal 41.

Please replace the paragraph bridging page 33 and 34 with the following rewritten paragraph:

The ad hoc/ infrastructure network integration destination address capture means shown in Fig. 1 can be configured as shown in Fig. 4. In Fig. 4, numerals 40 and 46 represent input terminals; 41 and 47 represent output terminals; 64 represents ad hoc network destination address capture means; 66 represents infrastructure network destination address capture means; 65 represents ad hoc/ infrastructure network destination address capture means; and 61 to 63 represent switches. The ad hoc/ infrastructure network identification means 65 identifies whether or not the network connected to the mobile terminal is an ad hoc network or infrastructure network by the packet input via the input terminal 40. When the mobile terminal is connected to the ad hoc network, the ad hoc/ infrastructure network identification means 65 controls the switches 61 and 63 to select the output from the ad hoc network destination address capture means 64. while it starts up the ad hoc network destination address capture means 64. ~~When the mobile terminal is connected to the infrastructure network, ...~~The ad hoc network destination address capture means 64 and the infrastructure network destination address capture means 66 receive a destination terminal name from the input terminal 64 and then transmit a destination terminal address request message onto the communication medium via the output terminal 41. The infrastructure network destination address capture means 66 also receives a receive packet from the input terminal 40 and a destination terminal address response message responded to the transmitted destination terminal request message and then outputs the result to the output terminal 47. The destination terminal address response message contains a requested destination terminal name and a destination terminal address.

Please replace the paragraph bridging pages 37-39 with the following rewritten paragraph:

The ad hoc/ infrastructure network identification means 65 shown in Fig. 4 can be configured as shown in Fig. 6. Referring to Fig. 6, numeral 40 represents an input terminal; 94 to 96 represent output terminals; 97 represents infrastructure network advertisement message receive means; 98 represents ad hoc network advertisement message receive means; 27a and 27b represent counters; 34 represents a timer; 91 and 92 represent comparators; and 93 represents decoder. In response to an input packet, the infrastructure network advertisement message receive means 97 detects an infrastructure network advertisement message containing the network address of a network connected to the mobile terminal and then outputs a message detection pulse to the counter 27a. In response to an input packet, the ad hoc network advertisement message receive means 98 detects an ad hoc network advertisement message containing the network address of a network connected to the mobile terminal and then outputs a message detection pulse to the counter 27b. The counter 27a counts up every time the message detection pulse is input and then receives a reset pulse when the timer 34 become time-out. The counter 27b counts up every time the message detection pulse is input and then receives a reset pulse when the timer 34 become time-out. In response to a reset pulse, the counter 27a outputs the count number of message detection pulses at the reset time to the counter 91. In response to a reset pulse, the counter 27b outputs the count number of message detection pulses at the reset time to the counter 92. The comparator 91 compares the input signal with zero and then outputs a pulse representing zero or other value. The comparator 92 compares the input signal with zero and then outputs a pulse representing zero or other value. When the comparator 91 outputs a pulse representing that the input signal is not zero, as a pulse starting up the infrastructure network destination

address capture means 66, to the output terminal 94. The ~~When the~~ comparator 92 outputs a pulse representing that the input signal is not zero, as a pulse starting up the infrastructure network destination address capture means 64, to the output terminal 95. The decoder 93 •receives the signal from the comparator 91 and the signal from the comparator 92. When the comparator 91 outputs a pulse representing that the input signal is not zero, the decoder 93 outputs a control signal to the switches 61 and 65 to selectively output an output from the infrastructure network destination address capture means 66 and outputs a control signal to the switch 61 to output an input signal to the infrastructure network destination address capture means 66. When the comparator 92 outputs a pulse representing that the input signal is not zero, the decoder 93 outputs a control signal to the switches 61 and 65 to selectively output an output from the ad hoc network destination address capture means 64 and outputs a control signal to the switch 61 to output an input signal to the ad hoc network destination address capture means 64.

Please replace the paragraph bridging pages 39 and 40 with the following rewritten paragraph:

The ad hoc/ infrastructure network integration address management means 45 shown in Fig. 1 can be configured a shown in Fig. 7. Referring to Fig. 7, numeral 40 represents an input terminal; 41 represents an output terminal; 102 represents infrastructure network address management means; 103 represents ad hoc network address management means; 104 represents ad hoc/ infrastructure network integration identification means; and 105 represents a switch. Based on the receive packet from the input terminal 40, the ad hoc/ infrastructure network integration network identification means 104 starts up the ad hock network management means 103 when the mobile terminal is connected to an ad hoc network

and starts up the infrastructure network management means 102 when the mobile terminal is connected to an infrastructure network. The ad hoc/ infrastructure network integration network identification means 104 selects the output from the ad hoc network address management means 103 or infrastructure network address management means 102 in a start-up state by controlling the switch 105 and outputs it to the ~~tot he~~ output terminal 41.

Please replace the paragraph bridging pages 43 and 44 with the following rewritten paragraph:

In contrast, the ad hoc network address management means 103 shown in Fig. 7 can be configured as shown in Fig. 9. Referring to Fig. 9, numerals 40 and 115 represent input terminals; ~~11~~ 111 represents an output terminal; 112 represents ad hoc network/ terminal address management means; 113 represents ad hoc network/ network address management means; and 114 represents a transmission queue. Each of the ad hoc network/ terminal address management means 112 ad the ad hoc/ network address management means 113 receives receive packets via the input terminal 40 for management operation. The ad hoc network/ terminal address management means 112 outputs messages for management to the transmission queue 114, thus sending it to the switch 105 via the output terminal 111. The ad hoc network/ network address management means 113 outputs messages for management to the transmission queue 114, thus sending it to the switch 105 via the output terminal 111. Each of the ad hoc network/ terminal address management means 112 and the ad hoc network/ network address management means 113 receives a signal representing whether or not the output terminal 24 (shown in Fig. 8) is connected to a newly configured ad hoc network, or is connected to the existing ad hoc network. The ad hoc network/ network address management means 113 outputs a network address of an ad hoc network to be

connected and a network address captured signal showing network address capture completion to the ad hoc network/ terminal address management means 112.

Please replace the paragraph bridging pages 47 and 48 with the following rewritten paragraph:

Next, explanation will be made as to the case where a new ad hoc network is configured. In this case, the ad hoc network/ network address capture means 123 starts up. The ad hoc network/ network address capture means 12 shown in Fig. 10 can be realized as shown in Fig. 11. Referring to Fig. 11, numerals 500 and 5014~~0~~ represent input terminals; 503, 510 and 511 represent output terminals; 502 represents network address candidate setting means; 503 represents ad hoc network/ network address request message transmission means; 504 represents ad hoc network/ network address captured signal detection means; 506 represents ad hoc network/ request network address spent message detection means; 507 represents a comparator; 508 represents a timer; and 509 represents a gate. The network address candidate setting means 502 receives a signal from the decoder 132 via the input terminal 500 and then outputs the network address candidate of an ad hoc network to be configured while it starts up the timer 508. The ad hoc network/ network address request message transmission means configures an ad hoc network/ network address request message using the input network address candidate and then outputs it as a broadcast packet to the transmission queue 133 to transmit onto the communication medium via the output terminal 511. The ad hoc network/ request network address spent message detection means 506 receives a packet on the communication medium via the input terminal, detects an ad hoc network/ request network address spent message, and then extracts a spent network address to output to the comparator 507. The comparator 507 compares the spent network address from

the ad hoc network/ request network address spent message detection means 506 with a network address candidate from the network address candidate setting means 502. If both the addresses are agreed, the comparator 507 re-starts up the network address candidate setting means 502 and then outputs a different network address as a network address candidate. At this time, the network address candidate setting means 502 restarts up the timer 508.

Please replace the paragraph bridging pages 49 and 50 with the following rewritten paragraph:

The ad hoc network/ terminal address management means 112 shown in Fig. 9 can be configured as shown in Fig. 12. Referring to Fig. 12, numerals 115, 198, 199 and 40 represent input terminals; 159 represents an output terminal; 150 represents ad hoc network/ terminal address capture means; 151 represents a control circuit; 152 and 153 represent memories; 154 represents a gate; 155 represents ad hoc network/ terminal address request detection means; 156 represents ad hoc network/terminal address list detection means; 157 represents ad hoc network/ terminal list transmission means; 158 represents a comparator; and a transmission queue 160. The ad hoc network/ terminal address capture means 150 receives a signal from the output terminal 24 via the input terminal 115, a network address captured signal from the output terminal 134 via the input terminal 199, a capture network address from the output terminal 131 via the input terminal 199; and a packet sent from the input terminal 40. The transmission queue 160 receives a necessary message as a broadcast packet transmits to the transmission queue via the output terminal 159. When capturing a 1~erminal address, the ad hoc network/ terminal address capture means 150 outputs a terminal address captured signal to the control circuit 151 and a terminal address list to the memory 152. When receiving a terminal address captured signal, the control circuit 151

B9 opens the gate 154 while it stores the open time into the memory 153.

Please replace the paragraph bridging pages 51 and 52 with the following rewritten paragraph:

The ad hoc network/ terminal address capture means 150 shown in Fig. 12 can be configured as shown in Fig. 13. Referring to Fig. 13, numerals 115, ~~131 (198)~~, ~~134 (199)~~ and 40 represent input terminals; 175, 178 and 179 represent output terminals; 183 and 182 represent logical product circuits; 171 represents a gate; 181 represents a decoder; 180 represents ad hoc network/ terminal address setting means; 174 represents ad hoc network/ terminal address list request message transmission means; 172 represents ad hoc network/ terminal address list message detection means; 173 represents ad hoc network/ terminal address selection means; and 177 and 178 represent switches. A signal is input from the output terminal 24 via the input terminal 115. The decoder 181 outputs a start-up pulse to the logical product circuit 182 when a new ad hoc network is configured and outputs a start-up pulse to the logical product circuit 183 when the mobile terminal is connected to the existing ad hoc network. The logical product circuit 183 obtains the logical product of the network address captured signal input via the input terminal 170 and the output of the decoder 181. The logical product circuit 182 obtains the logical product of the network address captured signal input via the input terminal 170 and the output of the decoder 181. When both the signal from the decoder 181 and the signal from the input terminal 198 are input, the logical product circuit 183 starts up the ad hoc network/ terminal address list request message transmission means 174 to connect the mobile terminal to the existing ad hoc network. When both the signal from the decoder 181 and the signal from the input terminal 198 are input, the logical product circuit 182 starts up the ad hoc network/ terminal address setting means 180.

Moreover, by controlling the switches 176 and 177, the decoder 181 outputs the output from the ad hoc network/ terminal address selection means 173 when the mobile terminal is connected to the existing ad hoc network and outputs the output from the ad hoc network/ terminal address setting means 180 when a new ad hoc network is configured.

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